### West Virginia Department of Environmental Protection Division of Air Quality

## **Fact Sheet**



# For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-08500004-2011 Application Received: January 26, 2011 Plant Identification Number: 085-00004 Permittee: Dominion Transmission, Inc.

Facility Name: Craig Compressor Station

Mailing Address: 445 West Main Street, Clarksburg, WV 26301

Revised: NA

Physical Location: Smithville, Ritchie County, West Virginia

UTM Coordinates: 491.49 km Easting • 4324.68 km Northing • Zone 17

Directions: From Clarksburg, take Route 50 West for 41 miles to Ellensboro exit.

Go left on Route 16 South for 18 miles thru Harrisville to Route 47.

Turn left and go 0.2 miles across bridge then turn right on Route 16

South. Go approximately 20 feet and turn right up hill. Go 0.3 miles to

station.

#### **Facility Description**

Craig Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) Code 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of three (3) 869 HP natural gas fired reciprocating engines, two (2) emergency generators, one (1) dehydrator reboiler, one (1) dehydration unit with a flare, and six (6) storage tanks of various sizes.

#### **Emissions Summary**

Plantwide Emissions Summary [Tons per Year]				
Regulated Pollutants	<b>Potential Emissions</b>	2010 Actual Emissions		
Carbon Monoxide (CO)	34.22	29.71		
Nitrogen Oxides (NO <sub>X</sub> )	245.10	234.52		
Particulate Matter (PM <sub>10</sub> )	0.96	0.61		
Total Particulate Matter (TSP)	0.96	0.61		
Sulfur Dioxide (SO <sub>2</sub> )	0.06	0.04		
Volatile Organic Compounds (VOC)	221.68	192.35		
$PM_{10}$ is a component of TSP.				
Hazardous Air Pollutants	Potential Emissions	2010 Actual Emissions		
Total Miscellaneous HAPs	9.86	5.56		

Some of the above HAPs may be counted as PM or VOCs.

#### **Title V Program Applicability Basis**

This facility has the potential to emit 245 tpy of NO<sub>x</sub> and 222 tpy of VOC. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Dominion Transmission, Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

#### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:		
45CSR2	To Prevent And Control Particulate Air Pollution From	
	Combustion Of Fuel In Indirect Heat Exchangers	
45CSR6	Open burning prohibited.	
45CSR10	Control of Sulfur Dioxide Emissions from Indirect Heat	
	Exchangers	
45CSR11	Standby plans for emergency episodes.	
45CSR13	Permits For Construction, Modification, Relocation And	
	Operation Of Stationary Sources Of Air Pollutants,	
	Notification Requirements, Administrative Updates,	
	Temporary Permits, General Permits, And Procedures For	
	Evaluation	
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as	
	annual emission inventory reporting.	
45CSR30	Operating permit requirement.	
40 C.F.R. Part 61	Asbestos inspection and removal	
40 C.F.R. Part 63, Subpart HH	National Emission Standards for Hazardous Air Pollutants	
	From Oil and Natural Gas Production Facilities	

40 C.F.R. Part 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	
45CSR4	No objectionable odors.
45CSR17	To Prevent And Control Particulate Matter Air Pollution From
	Materials Handling, Preparation, Storage And Other Sources
	Of Fugitive Particulate Matter

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

#### **Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-2497	September 27, 2002	
R13-2503	February 19, 2003	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

#### **Determinations and Justifications**

This is a renewal of the Title V permit which was issued on November 2, 2006 and modified on September 29, 2009. Changes to the most recent version of the Title V Permit consist of the following:

#### 1) Title V Boilerplate changes

- ➤ Condition 1.1. The design capacity for the dehydration unit still (DEHY01) was incorrectly listed as 17 mmscf/day. It has been corrected to 25 mmscf/day.
- Condition 1.2. This condition has been added to show the latest version of any Rule 13, 14, and 19 permits with the Issuance date of such permit.
- > Condition 2.1.4. This condition has been added and states: Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.
- ➤ Condition 3.1.1. and 3.1.2. These conditions were revised because the language in 45CSR§§6-3.1. & 3.2. was revised.

- ➤ Condition 3.1.3. The citation of authority was changed because 45CSR15 was repealed and 40 CFR 61 is now incorporated into 45CSR34. Also expanded 40 C.F.R. 61 citation to 40 C.F.R. §61.145(b). Slight language revision.
- Condition 3.3.1. Subsection "d" was added to this condition. Also section 14 of WV Code §§22-5-4 (a) was added in the citation of authority.
- Condition 3.5.3. and 3.5.5. These conditions were revised to require electronic submittal of the annual certification to USEPA. The certification shall now only be submitted to the USEPA by email.
- **2)** Condition 5.1.7. R13-2497 Specific requirement A.3. was added.
- 3) Conditions 5.3.2. & 5.5.3. These conditions were added in order to specify the proper test method for determining the composition of the wet natural gas entering the dehydration unit and the submission of emission summary reports for the dehydration unit.
- 4) 40 CFR 63, Subpart HH Area Source Requirements The facility is a minor source of HAPs and has benzene emissions less than 1 ton per year. The GACT requirements of 40 CFR63 Subpart HH and associated requirements are included in permit conditions 5.1.16. through 5.1.19., 5.2.4. and 5.3.3.
- 5) Condition 6.1.3. This permit condition was added to incorporate by reference the GACT requirements of 40 CFR 63 Subpart ZZZZ applicable to the emergency generator engines, in order to ensure that the facility will meet the compliance date of October 19, 2013. Because it is likely that some of the Subpart ZZZZ requirements for emergency reciprocating internal combustion engines (RICE) will be revised by USEPA, and since the compliance date is not until the year 2013, the specific requirements were not listed in the permit.
- 6) Section 7.0 This section of the permit has been added for the reciprocating engines EN01, EN02 and EN03 and incorporates the requirements of 40 CFR 63, Subpart ZZZZ applicable to the engines.
  - ➤ 40 CFR 63, Subpart ZZZZ RICE MACT Applicability The three engines are existing sparkignition (SI) two-stroke lean burn (2SLB) Ajax DPC-720 Reciprocating Engines/Integral Compressors that combust pipeline quality natural gas and are each rated at 869 HP. These engines meet the definition of reciprocating internal combustion engines (RICE) according to 40 CFR § 63.6585(a):
  - ➤ Since, this facility is not a major source of HAPS, the 40 CFR 63, Subpart ZZZZ area source requirements apply. The horsepower range for each engine fits into the greater than 500 HP category as established by the regulation
  - The three (2SLB) engines are subject to the maintenance requirements (every 4,320 hours change oil/filter, inspect spark plugs, and inspect hoses/belts).

#### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

**40 CFR Part 60 Subpart JJJJ** – The compressor engines and emergency generator engines commenced construction before June 12, 2006.

**40 CFR Part 64** – The only Pollution-Specific Emission Units potentially subject to the CAM rule is DEHY01 for VOC. However, DEHY01 does not have a VOC limit for which an add-on control device is needed to meet such limit. There are no other emission units for which the emissions trigger the major source threshold. Therefore this rule is not applicable to the facility.

**Greenhouse Gas Permitting** - This is a renewal Title V permit and there have been no modifications that would have triggered a PSD permit. Therefore, there are no applicable GHG requirements.

#### **Request for Variances or Alternatives**

None.

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date: November 2, 2011 Ending Date: December 2, 2011

All written comments should be addressed to the following individual and office:

Frederick Tipane
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57<sup>th</sup> Street SE
Charleston, WV 25304

#### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

#### **Point of Contact**

Frederick Tipane
West Virginia Department of Environmental Protection
Division of Air Quality
601 57<sup>th</sup> Street SE
Charleston, WV 25304

Phone: 304/926-0499 ext. 1215 • Fax: 304/926-0478

#### **Response to Comments (Statement of Basis)**

- 1) A comment was received by Dominion Transmission, LLC indicating that Tanks *TK04*, *TK10*, *TK11*, *TK12* were replaced in 2011 and that the year of installation be changed in the "Emission Units" table in section 1.1. Therefore these changes have been made. With the exception of Tank *TK12*, the contents, configuration and capacities of the tanks have not changed. The design capacity of *TK12* was reduced from 6500 gallons to 6000 gallons. The table has been revised to reflect the new design capacity of *TK12*.
- 2) As a result of comments received by the USEPA on the permit, conditions 5.1.10., 5.1.11., and 5.1.12. were deleted from the draft/proposed permit due to the fact that these requirements were already contained in condition 5.1.8. The authority of these deleted conditions is from permit R13-2497,

- sections A.6., A.7., and A.8. respectively. Therefore the citation of authority in condition 5.1.8. has been revised to include "A.6., A.7., and A.8." The subsequent conditions to 5.1.9. have been renumbered.
- 3) Comments were also received by the USEPA suggesting that 40 CFR §63.11(b) be cited for the flare requirements instead of 40 CFR §60.18 in conditions 5.1.8.through 5.1.13. of the draft permit. The reference to §60.18 however is contained in the WV Rule 13 permit R13-2497 and therefore carried over to the Title V permit. Permit R13-2497 was issued as a federally enforceable document to ensure that the facility remains a synthetic minor source (area source) of HAP emissions and thereby not subject to Subpart HH. The Rule 13 permit was issued prior to the revised Subpart HH which incorporated GACT requirements for area sources of HAPs. Since the facility is not a major source of HAPs and not subject to the requirements of Subpart HH for major sources, and the GACT requirements of Subpart HH for which the facility is subject do not contain requirements to operate a flare, 40 CFR §63.11(b) is not applicable. Furthermore, the facility is not subject to 40 CFR Part 60. But since the requirements to operate the flare in accordance with §60.18 are part of the R13-2497 requirements, the references to §60.18 will remain in the Title V permit. The "40 CFR §60.18" citation of authority in condition 5.1.8. of the current and draft permits has been removed due to the fact that the facility is not subject to 40 CFR Part 60.